

L Number	Hits	Search Text	DB	Time stamp
1	68	protrusion and embedded and antenna and card	USPAT; US-PGPUB; EP ; JPO; DERWENT; IBM_TDB USPAT	2003/06/24 08:18
2	2	("4897534" "4999742").PN.	USPAT	2003/06/24 08:13
3	7	("4222516" "4603249" "4717438" "4725924" "4727246" "4733061" "4754319").PN.	USPAT	2003/06/24 08:14
4	4	chip and pads and embedded and antenna and 29/600-602.1.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB USPAT	2003/06/24 08:39
5	9	("4674175" "4720690" "4916808" "4960983" "5055913" "5055968" "5235736" "5272596" "5321240").PN.	USPAT	2003/06/24 08:20
6	10	("3637994" "4222516" "4417413" "4603249" "4649418" "4692604" "4746392" "4764803" "4849617" "4921160").PN.	USPAT	2003/06/24 08:22
7	7	("4104728" "4417413" "4450024" "4463971" "4617216" "4677528" "4682017").PN.	USPAT	2003/06/24 08:24
8	0	contact adj pads near embed4\$ and antenna	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/24 08:40
9	0	contact and pads near embed4\$ and antenna	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/24 08:40
10	9	contact and pads near embedded and antenna	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/24 08:47
11	1		USPAT	2003/06/24 08:42
12	15	("3947867" "4551746" "4654694" "4857988" "5041899" "5095402" "5124783" "5455384" "5490324" "5523622" "5559364" "5574309" "5600101" "5604328" "5608265").PN.	USPAT	2003/06/24 08:43
13	10	("4511201" "4586972" "4730241" "4790894" "4821007" "4874721" "4973799" "5140745" "5220483" "5225969").PN.	USPAT	2003/06/24 08:44

Search History 6/24/03 10:26:21 AM Page 1

14	17	("3351816" "3398232" "3460069" "3568098" "3780431" "3876822" "4127832" "4150345" "4366198" "4372046" "4375053" "4375054" "4538346" "4609892" "4647878" "4673904" "4681656").PN.	USPAT	2003/06/24 08:46
15	113	chip and (contact or pads) and mbedded near antenna	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/24 09:03
16	16	("4725924" "4841134" "5495250" "5598032" "5888624" "5898215" "5913110" "5955021" "5969951" "6025054" "6068192" "6151511" "6161761" "6173898" "6223989" "6250555").PN.	USPAT	2003/06/24 08:53
17	16	("4583099" "4598276" "4859991" "4897534" "4999742" "5237165" "5378857" "5528222" "5552790" "5598032" "5608417" "5640004" "5671525" "5710421" "5852289" "5963177").PN.	USPAT	2003/06/24 08:56
18	9	("3934122" "4009375" "4674175" "4818973" "4857893" "5014040" "5204663" "5257011" "5396218").PN.	USPAT	2003/06/24 09:03
19	17	chip and contact near embedded and antenna	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/24 09:15
20	0	2001175837.URPN.	USPAT	2003/06/24 09:09
21	1	1998-558461.NRAN.	DERWENT	2003/06/24 09:09
22	19	("5185689" "5350705" "5374578" "5432732" "5436477" "5466629" "5495117" "5534463" "5541807" "5567987" "5580814" "5675185" "5686760" "5739563" "5767541" "5768182" "5834845" "6004839" "6008081").PN.	USPAT	2003/06/24 09:13
23	4	chip and pad near embedded and antenna	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/24 09:15
24	5	chip and pad near (embedded or embedding) and antenna	USPAT; US-P PUB; EP ; JPO; DERWENT; IBM_TDB	2003/06/24 09:24

25	1	"6002170".PN.	USPAT	2003/06/24 09:20
26	15	("3947867" "4551746" "4654694" "4857988" "5041899" "5095402" "5124783" "5455384" "5490324" "5523622" "5559364" "5574309" "5600101" "5604328" "5608265").PN.	USPAT	2003/06/24 09:20
27	4	("4532419" "4649418" "4910582" "5272374").PN.	USPAT	2003/06/24 09:22
28	2	chip and pad near (embedded or embedding) and smart near card	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/24 09:25
29	13	chip and pad near (embedded or embedding) and card	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/24 09:26
30	110	(embedded or embedding) near contact and card	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/24 09:26
-	25731	resonator and method	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/23 08:57
-	3	resonator and method and bloom and body near element	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/19 15:53
-	7	Mikkonen near Esa.inv.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/19 16:05
-	2	("5130683" "5990763").PN.	USPAT	2003/06/19 15:54
-	10	("3571768" "4034319" "4278957" "4280113" "4292610" "4307357" "4398164" "4706051" "5329687" "5502715").PN.	USPAT	2003/06/19 15:55
-	186	(333/212, 29/464 , 29/600 , 315/3.5 , 333/239 , 72/267).cccls. and resonator	USPAT; US-PGPUB; EP ; JPO; DERWENT; IBM_TDB	2003/06/19 16:10

-	10	("2161419" "2669769" "2966987" "3157847" "3587008" "3737816" "3949327" "3952270" "4060779" "4439748").PN.	USPAT	2003/06/19 16:09
-	2	(29/464 , 29/600).ccls. and res nat r	USPAT; US-PGPUB; EP ; JPO; DERWENT; IBM_TDB	2003/06/19 16:11
-	3350	(333/203-234).ccls. and resonator	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/19 16:11
-	0	(333/203-234).ccls. and resonator and extrusion and punch and cavity and bloom	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/19 16:13
-	0	(333/203-234).ccls. and resonator and extrusion and punch near recess	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/19 16:14
-	0	(333/203-234).ccls. and resonator and punch near recess	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/19 16:18
-	2	4422236.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/19 16:19
-	2	4507631.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/19 16:20
-	4	("2437482" "2510358" "2752577" "3718865").PN.	USPAT	2003/06/19 16:19
-	2	4398164.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/19 16:21
-	2	6114928.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/19 16:21
-	3	("5347246" "5428325" "5612655").PN.	USPAT	2003/06/19 16:22

-	2	5990763.pn.	USPAT; US-P PUB; EPO; JPO; DERWENT; IBM_TDB USPAT	2003/06/19 16:36
-	10	("3571768" "4034319" "4278957" "4280113" "4292610" "4307357" "4398164" "4706051" "5329687" "5502715").PN.		2003/06/19 16:36
-	0	solder near bump and embebbbed	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB USPAT;	2003/06/20 12:16
-	106	solder near bump and embed	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB USPAT;	2003/06/20 12:27
-	151	bump and embed and card	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB USPAT;	2003/06/20 12:46
-	37	("4889980" "4890197" "4931853" "4990759" "4997791" "5018051" "5048179" "5121294" "5134773" "5173840" "5184209" "5192682" "5208450" "5232532" "5244840" "5250341" "5335145" "5346576" "5387306" "5480842" "5510074" "5585618" "5671525" "5725819" "5837992" "5852289" "5876536" "5952713" "5955021" "5969951" "5996897" "6019284" "6025054" "6036099" "6036797" "6066231" "6073856").PN.	USPAT	2003/06/20 12:38
-	4	card and thickness and embedded adj solder	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB USPAT;	2003/06/20 12:49
-	4	antenna and embedded adj solder	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB USPAT;	2003/06/20 12:50
-	0	embedded adj solder near in adj antenna	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 12:51

-	0	embedded adj solder near antenna	USPAT; US-PGPUB; EPO; JP ; DERWENT; IBM_TDB	2003/06/20 12:52
-	4	mbedded adj s ld r and antenna	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 12:52
-	0	embedded adj solder and in adj antenna	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 12:53
-	48	embedded adj solder and conductor	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 12:55
-	11	embedded adj solder and module	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 12:55
-	31	("3038620" "3061919" "3527495" "3960279" "3986255" "4004261" "4346516" "4801065" "4830264" "4983804" "5118027" "5118248" "5299730" "5346775" "5401911" "5447886" "5531942" "5536133" "5539153" "5620927" "5643831" "5674785" "5739585" "5816482" "5839641" "5841198" "5867082" "5872400" "5899737" "5986348" "6100175").PN.	USPAT	2003/06/20 12:56
-	11212	protrusion and embedded	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 13:04
-	44	protrusion and embedded and smart near card	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/24 08:07
-	318	206/310.ccls.	USPAT; US-PGPUB; EPO; JP ; DERWENT; IBM_TDB	2003/06/20 13:07

-	2154	pr trusi n and embedded and (pcb or board)	USPAT; US-PGPUB; EPO; JP ; DERWENT; IBM_TDB	2003/06/20 13:13
-	93	protrusion and embedded and (pcb or board) and 29/\$.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 13:19
-	84	protrusion and contact and embedded and (pcb or board) and 29/\$.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 13:27
-	14	("3148310" "3541222" "3835531" "3998824" "4050756" "4136275" "4346516" "4644101" "4761871" "4902857" "4931598" "4966857" "5121299" "5172303").PN.	USPAT	2003/06/20 13:26
-	1869	contact near embedded	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 13:28
-	60	contact near embedded and card and board	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 13:31
-	42	contact near embedded and antenna	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 13:38
-	13	smart near card and embedded near contact	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 13:39
-	1	"5834755".PN.	USPAT	2003/06/20 13:40
-	0	29/830.ccls. and maskfilm	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/23 08:58
-	11	29/830.ccls. and mask near film	USPAT; US-PGPUB; EP ; JPO; DERWENT; IBM_TDB	2003/06/23 09:01

-	0	29/830.ccls. and mask and base and parting near layer	USPAT; US-P PUB; EPO; JP ; DERWENT; IBM_TDB	2003/06/23 09:01
-	52	mask and base and parting near layer	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/23 11:12
-	0	20030006696.URPN.	USPAT	2003/06/23 09:08
-	0	base and parting near layer and PCB	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/23 09:11
-	0	base adj layer and parting near layer and PCB	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/23 09:12
-	0	base adj layer and parting and mask near film	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/23 09:13
-	5	("4563073" "5267004" "5450183" "5546173" "5666623").PN.	USPAT	2003/06/23 09:15
-	9	("4024030" "4448636" "4780177" "4911785" "5207865" "5334487" "5354593" "5451721" "5672760").PN.	USPAT	2003/06/23 09:18
-	6	("4759984" "4808662" "4870134" "5066543" "5185203" "5436041").PN.	USPAT	2003/06/23 09:20
-	0	5965254.URPN.	USPAT	2003/06/23 09:20
-	5	("4563073" "5267004" "5450183" "5546173" "5666623").PN.	USPAT	2003/06/23 10:16
-	0	" ECHIGO, F; KISHIMOTO, K ; KONDO, T ; NAKAMURA, S ; TAKENAKA, T".inv.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/23 10:32
-	0	ECHIGO near KISHIMOTO.inv.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/23 10:33
-	0	ECHI near KISHIMOTO.In.	USPAT; US-P PUB; EPO; JP ; DERWENT; IBM_TDB	2003/06/23 10:33

-	208	base adj layer and parting	USPAT; US-PGPUB; EP ; JPO; DERWENT; IBM_TDB USPAT	2003/06/23 10:35
-	7	("4024030" "4621019" "5334487" "5451721" "5674580" "6120693" "6255039").PN.	USPAT	2003/06/23 10:43
-	97	TAKENAKA near TOSHIAKI .in.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB USPAT	2003/06/23 11:17
-	0	1054582.URPN.	USPAT	2003/06/23 11:17
-	8	TAKENAKA near TOSHIAKI .in. and 29/\$.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB USPAT	2003/06/23 11:19
-	0	20010025415.URPN.	USPAT	2003/06/23 11:20

-	0	(333/203-234).cccls. and resonator and punch near recess	USPAT; US-P PUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/19 16:18
-	2	4422236.pn.	USPAT; US-P PUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/19 16:19
-	2	4507631.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/19 16:20
-	4	("2437482" "2510358" "2752577" "3718865").PN.	USPAT	2003/06/19 16:19
-	2	4398164.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/19 16:21
-	2	6114928.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/19 16:21
-	3	("5347246" "5428325" "5612655").PN.	USPAT	2003/06/19 16:22
-	2	5990763.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/19 16:36
-	10	("3571768" "4034319" "4278957" "4280113" "4292610" "4307357" "4398164" "4706051" "5329687" "5502715").PN.	USPAT	2003/06/19 16:36
-	0	solder near bump and embbebed	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 12:16
-	106	solder near bump and embed	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 12:27
-	151	bump and embed and card	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 12:46

Ant-klr/ler

-	37	("4889980" "4890197" "4931853" "4990759" "4997791" "5018051" "5048179" "5121294" "5134773" "5173840" "5184209" "5192682" "5208450" "5232532" "5244840" "5250341" "5335145" "5346576" "5387306" "5480842" "5510074" "5585618" "5671525" "5725819" "5837992" "5852289" "5876536" "5952713" "5955021" "5969951" "5996897" "6019284" "6025054" "6036099" "6036797" "6066231" "6073856").PN.	USPAT	2003/06/20 12:38
-	4	card and thickness and embedded adj solder	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 12:49
-	4	antenna and embedded adj solder	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 12:50
-	0	embedded adj solder near in adj antenna	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 12:51
-	0	embedded adj solder near antenna	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 12:52
-	4	embedded adj solder and antenna	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 12:52
-	0	embedded adj solder and in adj antenna	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 12:53
-	48	embedded adj solder and conductor	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 12:55
-	11	embedded adj solder and module	USPAT; US-PGPUB; EP ; JPO; DERWENT; IBM_TDB	2003/06/20 12:55

-	31	("3038620" "3061919" "3527495" "3960279" "3986255" "4004261" "4346516" "4801065" "4830264" "4983804" "5118027" "5118248" "5299730" "5346775" "5401911" "5447886" "5531942" "5536133" "5539153" "5620927" "5643831" "5674785" "5739585" "5816482" "5839641" "5841198" "5867082" "5872400" "5899737" "5986348" "6100175").PN.	USPAT	2003/06/20 12:56
-	11212	protrusion and embedded	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 13:04
-	44	protrusion and embedded and smart near card	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 13:13
-	318	206/310.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 13:07
-	2154	protrusion and embedded and (pcb or board)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 13:13
-	93	protrusion and embedded and (pcb or board) and 29/\$.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 13:19
-	84	protrusion and contact and embedded and (pcb or board) and 29/\$.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 13:27
-	14	("3148310" "3541222" "3835531" "3998824" "4050756" "4136275" "4346516" "4644101" "4761871" "4902857" "4931598" "4966857" "5121299" "5172303").PN.	USPAT	2003/06/20 13:26
-	1869	contact near embedded	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 13:28

-	60	contact near embedded and card and board	USPAT; US-PGPUB; EP ; JPO; DERWENT; IBM_TDB	2003/06/20 13:31
-	42	contact near embedded and antenna	USPAT; US-P PUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 13:38
-	13	smart near card and embedded near contact	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/20 13:39
-	1	"5834755".PN.	USPAT	2003/06/20 13:40
-	0	29/830.ccls. and maskfilm	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/23 08:58
-	11	29/830.ccls. and mask near film	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/23 09:01
-	0	29/830.ccls. and mask and base and parting near layer	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/23 09:01
-	52	mask and base and parting near layer	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/23 11:12
-	0	20030006696.URPN.	USPAT	2003/06/23 09:08
-	0	base and parting near layer and PCB	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/23 09:11
-	0	base adj layer and parting near layer and PCB	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/23 09:12

-	0	base adj layer and parting and mask near film	USPAT; US-PGPUB; EP ; JPO; DERWENT; IBM_TDB	2003/06/23 09:13
-	5	("4563073" "5267004" "5450183" "5546173" "5666623").PN.	USPAT	2003/06/23 09:15
-	9	("4024030" "4448636" "4780177" "4911785" "5207865" "5334487" "5354593" "5451721" "5672760").PN.	USPAT	2003/06/23 09:18
-	6	("4759984" "4808662" "4870134" "5066543" "5185203" "5436041").PN.	USPAT	2003/06/23 09:20
-	0	5965254.URPN.	USPAT	2003/06/23 09:20
-	5	("4563073" "5267004" "5450183" "5546173" "5666623").PN.	USPAT	2003/06/23 10:16
-	0	" ECHIGO, F; KISHIMOTO, K ; KONDO, T ; NAKAMURA, S ; TAKENAKA, T".inv.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/23 10:32
-	0	ECHIGO near KISHIMOTO.inv.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/23 10:33
-	0	ECHIGO near KISHIMOTO.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/23 10:33
-	208	base adj layer and parting	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/23 10:35
-	7	("4024030" "4621019" "5334487" "5451721" "5674580" "6120693" "6255039").PN.	USPAT	2003/06/23 10:43
-	97	TAKENAKA near TOSHIAKI .in.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/23 11:17
-	0	1054582.URPN.	USPAT	2003/06/23 11:17
-	8	TAKENAKA near TOSHIAKI .in. and 29/\$.ccis.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/23 11:19
-	0	20010025415.URPN.	USPAT	2003/06/23 11:20

US-PAT-NO: 5852289

DOCUMENT-IDENTIFIER: US 5852289 A

TITLE: Non-contact type IC card and method
of producing the same

DATE-ISSUED: December 22, 1998

INVENTOR-INFORMATION:

NAME	CITY
STATE ZIP CODE COUNTRY	
Masahiko; Tsumori	Kyoto
N/A N/A JP	

INT-CL: [06] G06K019/06

US-CL-ISSUED: 235/492, 235/380 , 235/488

US-CL-CURRENT: 235/492, 235/380 , 235/488

FIELD-OF-SEARCH: 235/488; 235/492 ; 235/380

REF-CITED:

U.S. PATENT DOCUMENTS		
PAT-NO	ISSUE-DATE	PATENTEE-NAME
	US-CL	
4897534	January 1990	Haghiri-Tehrani
235/488	N/A	N/A
4999742	March 1991	Stampfli
361/400	N/A	N/A

ART-UNIT: 286

PRIMARY-EXAMINER: Pitts; Harold

DERWENT-ACC-NO: 1998-558461

DERWENT-WEEK: 200271

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Smart card with integrated circuit
chip - has lead frame contacts that are used to connect
with antenna contacts in card

INVENTOR: KISTENMACHER, D; WILM, R

PRIORITY-DATA: 1997DE-1016342 (April 18, 1997)

PATENT-FAMILY:

PUB-NO	PAGES	PUB-DATE	
LANGUAGE		MAIN-IPC	
DE 19716342 A1		October 22, 1998	N/A
006	G06K 019/077		
WO 9848379 A1		October 29, 1998	G
000	G06K 019/077		
DE 19716342 C2		February 25, 1999	N/A
000	G06K 019/077		
AU 9876406 A		November 13, 1998	N/A
000	G06K 019/077		
EP 976105 A1		February 2, 2000	G
000	G06K 019/077		
EP 976105 B1		September 11, 2002	G
000	G06K 019/077		
DE 59805517 G		October 17, 2002	N/A
000	G06K 019/077		

INT-CL (IPC): G06K019/077

ABSTRACTED-PUB-NO: DE 19716342A

BASIC-ABSTRACT:

The card has a integrated circuit chip that contacts an
embedded antenna. The
semiconductor wafer is built into a chip form that has a

bonded lead frame with
micro welded connections.

The formed chip (10) has antenna contacts (15) on one side
and the chip is
inserted into a recess (12) in the plastic card with the
contact pads engaging
those (13) of the antenna coil (14) that is embedded in the
coil.

ADVANTAGE - Has simple and reliable connection within card.

----- KWIC -----

Derwent Accession Number - NRAN (1):
1998-558461